

MEASUREMENT OF LONELINESS AMONG CLIENTS REPRESENTING
FOUR STAGES OF CANCER: AN EXPLORATORY STUDY(U) AIR
FORCE INST OF TECH WRIGHT-PATTERSON AFB OH S SMITH

1/1

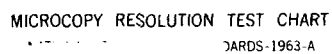
UNCLASSIFIED

MAR 85 AFIT/CI/NR/85-48T

F/G 5/10

NL

E-SUT



MICROCOPY RESOLUTION TEST CHART

DARDS-1963-A

AD-A156 896

Measurement of Loneliness among Clients
Representing Four Stages of Cancer:
An Exploratory Study

Suanne Smith

A Thesis Submitted in Partial
Fulfillment of the Requirements
for the Masters of Science in Nursing

School of Nursing
Southern Illinois University, Edwardsville
Edwardsville, Illinois

March, 1985

DTIC
ELECTE
S JUL 15 1985 D
G

DISTRIBUTION STATEMENT A
Approved for public release
Distribution Unlimited

85 06 24 080

DTIC FILE COPY

UNCLASS

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER AFIT/CI/NR 85-48T	2. GOVT ACCESSION NO. AD-A156 896	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Measurement of Loneliness among Clients Representing Four Stages of Cancer: An Exploratory Study		5. TYPE OF REPORT & PERIOD COVERED THESIS/DISSERTATION
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Suanne Smith		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS AFIT STUDENT AT: Southern Illinois University		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS AFIT/NR WPAFB OH 45433		12. REPORT DATE 1985
		13. NUMBER OF PAGES 58
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASS
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) 1		
18. SUPPLEMENTARY NOTES APPROVED FOR PUBLIC RELEASE: IAW AFR 190-1X 14 May 85 LYNN E. WOLAVER Dean for Research and Professional Development AFIT, Wright-Patterson AFB OH		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) ATTACHED		

DD FORM 1473

1 JAN 73

EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASS

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

ABSTRACT

This exploratory research project studied loneliness in clients in four stages of cancer. The purpose was to determine if cancer clients at various stages of illness experience loneliness and the differences in the degree of loneliness between groups of cancer clients at various stages of illness. Forty-seven clients (21 males and 26 females) participated in the study: 12 in the initial diagnosis stage, 12 in the remission stage, 12 in the recurrence stage and 11 in the terminal stage. The Revised UCLA Loneliness Scale was administered to measure clients' degree of loneliness.

Two hypotheses were proposed for this study: 1) clients with cancer would experience loneliness, and 2) there would be a significant difference in the degree of perceived loneliness experienced by clients in four different stages of illness. The first hypothesis was supported. The mean scores indicated that cancer clients do experience loneliness. A moderate degree of loneliness was found in clients who were initially diagnosed with cancer. Selected clients in all four stages of cancer (34%) did have survey scores indicating moderate to moderately high degrees of loneliness.

The second hypothesis was not supported. A one-way analysis of variance at .05 level of significance was accomplished but there was no significant difference noted between any of the groups.

A Pearson correlation coefficient was performed with a finding that a higher degree of loneliness occurred in clients who were not actively involved in organizations.

Seventy-eight percent of clients in the 60 to 69 year age range had a score of 32 or higher, indicating a greater degree of loneliness in this age group. Eighty-four percent of clients in the 70 to 79 year age range had scores of 30 or less indicating a low degree of loneliness.

Recommendations for future study are to increase the sample size and to survey clients living in metropolitan areas. Further study of the 60 to 69 year and 70 to 79 year age groups should be accomplished to confirm the disparity in loneliness scores noted in this research.

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Part	Avail and/or Special
A/1	



TABLE OF CONTENTS

	Page
ABSTRACT	11
LIST OF TABLES	vi
LIST OF FIGURES	vii
ACKNOWLEDGEMENTS	viii
 CHAPTER	
I. INTRODUCTION	1
Introduction	1
Statement of the Problem	5
Purpose of the Study	5
Review of Literature	6
Theoretical Framework	15
Hypotheses	27
Definitions of Terms	28
II. METHODOLOGY	30
Overview of Design	30
Instrumentation	30
Sampling Plan	32
Data Collection Procedure	33
Data Analysis	35
Limitations	35
III. FINDINGS	37
Description of the Sample	37
Hypotheses Considered	40
Additional Findings	41
Discussion of Findings	41
IV. SUMMARY AND RECOMMENDATION	45
Summary	45
Recommendations	46
REFERENCES	48

APPENDICES

Page

A	Personal Experience Survey	55
B	Letter Granting Permission from Dr. L. A. Peplau . .	56
C	Acknowledgement of Consent	57
D	Demographic Data	58

LIST OF TABLES

Table	Page
1. Sex and Age of Subjects	38
2. Distribution of Subjects' Loneliness Scores	38
3. Score Range, Means and Standard Deviation of Loneliness Scores across the Four Groups	39
4. One-way ANOVA of Loneliness Scores	39
5. Pearson Correlation Coefficients of Loneliness Scores and Demographic Data	41

LIST OF FIGURES

Figure	Page
1. Prototype of a Lonely Person	4
2. Clinical Course of Cancer	5
3. Schema of Aloneliness	16

ACKNOWLEDGEMENTS

Many people provided support to me in their unique way. Without these very important people this research could not have been completed.

Dr. Mary deMenses, Chairperson of my committee, whose guidance, patience and confidence provided the much needed encouragement to continue.

Dr. Sharon Merritt, a very special instructor and role model, who sparked the idea for this research by introducing me to the words "concept" and "theoretical framework".

Dr. Gloria Perry for her guidance and assistance.

My peers in the Medical-Surgical program, who provided the encouragement to continue in this study.

The physicians, office personnel and radiation therapy technologists who willingly worked with me to collect the data.

My parents and sisters who have supported me in all my endeavors.

My husband, Ken, and children, Sara and Christopher, who never failed to listen, to support, and to love.

CHAPTER ONE

INTRODUCTION

Introduction

Recent data from the American Cancer Society (1983) suggests that one out of three Americans developed cancer last year. Modern developments have extended the survival time for many types of cancer, such as Hodgkin's disease, cancers of the prostate, kidney and bladder, and leukemia (American Cancer Society, 1983). The prevalence of this disease challenges us to understand how people live and cope with cancer.

Cancer permeates every aspect of people's lives including the role within the family, the social role and the individual's career role (Barckley, 1969). It evokes fear, a feeling of dread, and a sense of doom (Mastrovito, 1974). To some people cancer is so frightening, the word cannot be uttered. Euphemisms such as growths and tumors are used in place of the word cancer. Cancer can attribute to its victims a feeling of being unclean (Mastrovito, 1974) and being contagious (Creech, 1975). Because of the fear of cancer being contagious, family, friends, co-workers, employers, and acquaintances may avoid these persons (Bahnsen, 1975). Cancer can mean extreme pain, mutilation, hopelessness, dependency, a sense of helplessness that nothing can be done, rejection by the family and friends, and a threat to survival (Barckley, 1969; Krumm, 1982; Mastrovito, 1974).

The impact of this disease as well as negative beliefs about cancer may alter the normal coping patterns of these clients. Defense mechanisms can be employed which interfere with interpersonal relationships among family and friends (Shands, Finesinger, Cobb, & Abrams, 1951). Clients may exaggerate or frequently reiterate their problems, or try to hide their problems from others indicating they are coping well with the disease process. These behaviors can confuse family members and friends, and obstruct interpersonal relationships rather than improve them (Wortman & Dunkel-Schetter, 1979).

If cancer clients do express their apprehensions and uncertainties to others, they fear rejection and abandonment by family members, friends and health care professionals. People are frequently at a loss as what to say to cancer clients. They avoid talking about issues important to cancer clients or they avoid visiting these clients. Thus cancer clients' need for increased social support from others may not be met. While desirous of more social interaction with others, clients may no longer be a part of a social group or an active participant in family or group activities. As social interrelationships decrease, clients are alone more often and they may become unhappy. When clients desire more social interaction than they are actually experiencing, they are said to be lonely (Peplau, Miceli, & Morasch, 1982).

The concept of loneliness has been identified by a cluster of thoughts, feelings and behaviors. Horowitz, French and Anderson (1982) developed a theoretical description of a lonely person - - a standard by which a client can be evaluated (Figure 1). Lonely people can display all of these features but actually no one feature is either necessary or sufficient to be labelled as lonely. Clients can display many of these features during the clinical course of cancer. When these thoughts, feelings and behaviors occur in cancer clients, they can be experiencing loneliness.

This study focused on one particular area that has been identified as a psychosocial problem among cancer clients - - impaired interpersonal relationships. Specifically the suboptimal relations experienced by cancer clients causing the distress of loneliness was explored. This nurse researcher was particularly interested in which stages during the clinical courses of cancer do clients experience loneliness. Holland's (1973) schema for the clinical courses of cancer (Figure 2) is helpful in understanding the stages of cancer. This researcher tested clients in four stages of cancer: the initial stage (number 1 in Figure 2), the remission stage in which the final outcome is not known (number 2), the recurrence stage (number 3), and the terminal stage (number 4). The degree of loneliness experienced by clients in these four stages was measured by the Revised UCLA Loneliness Scale developed by Russell, Peplau, and Cutrona (1980).

identities is the notion that one is still a separate entity no matter how emotionally close one becomes with another person (Kubistant, 1981).

Loneliness represents the negative aspect of aloneliness. It is this feeling that something is missing in the individual's relationships (Kubistant, 1981). Existential loneliness is a term used by Moustakes (1961) as that state of affairs that individuals make for themselves or is determined by fate. Aloneness anxiety is the fear of being by oneself for fear of being lonely (Kubistant, 1981). Loneliness anxiety is a "fundamental breach between what one is and what one pretends to be" (Moustakas, 1961, p. 24). For the purpose of this study, loneliness anxiety is defined as the breach between what one is and what one desires to be. This area was the primary concern of this research. (See delineated area in Figure 3). Alienation is subjectively and emotionally related with feelings of being different, not being understood (within) and having no close friends (without) (Rubenstein and Shaver, 1982). Isolation is an objective spatial term. Social isolation is knowing few people who would be sources of rewarding exchanges (Fischer & Phillips, 1982). Emotional isolation is the absence of a personal, intimate relationship (Weiss, 1973). Social isolation, in and of itself, does not consider the desire of the individual. If the desire of the individual for social contact is high and the lack of achieved relationships is considered, then social isolation leads to loneliness (Peplau, Russell, & Heim, 1979).

adapted part of Kubistant's schema for the present research study (Figure 3). Kubistant used the terms "within" and "without" (p. 462) to differentiate the two areas of the term isolation. This researcher used social and emotional to describe the two areas of isolation.

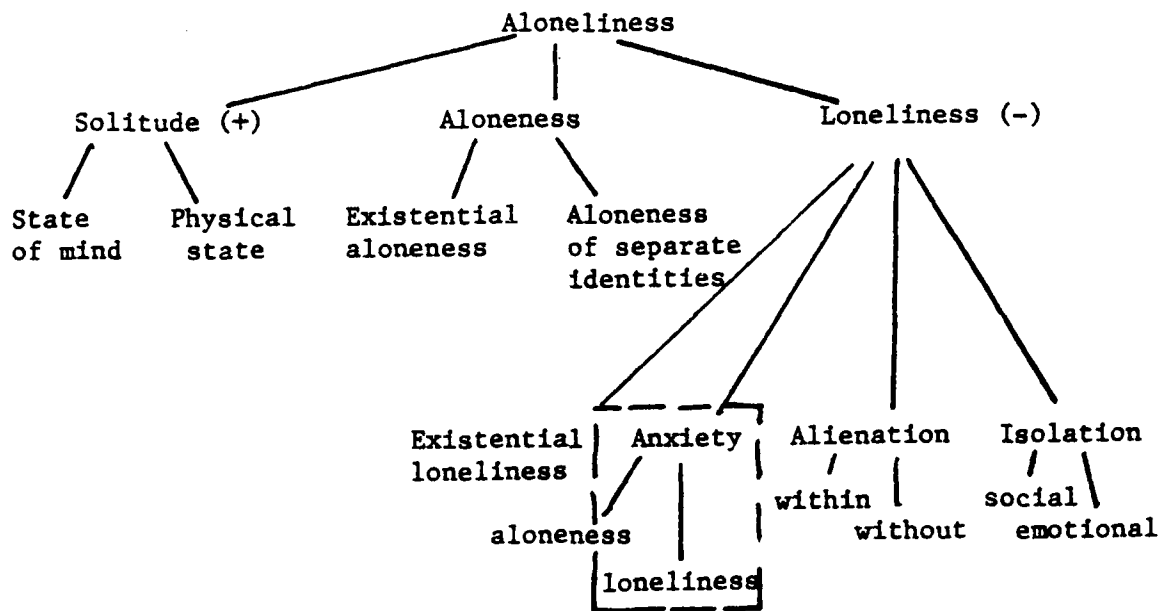


Figure 3. Schema of Aloneliness. Kubistant, 1981, p. 462.

Solitude is the positive aspect of aloneliness which is either a state of mind or a physical state. It is usually a time when one gets in touch with oneself (Kubistant, 1981).

Aloneness is the neutral concept of aloneliness that reflects a person's uniqueness and individuality. Existential aloneness is that state when one reflects on his individuality but also the finiteness in this life. Aloneness of separate

No studies were found by this researcher that used an instrument to identify and measure loneliness in any adult with a long-term medical illness, terminal illness or with cancer in any of its stages. There is a great need to ascertain if this is a psychosocial problem of cancer clients. Therefore, loneliness and its possible variable degree among four stages of cancer clients was the focus of this study.

Theoretical Framework

The concept of loneliness has been approached from eight different theoretical frameworks: psychodynamic, sociological, existential humanistic, interactionist, privacy, systems, phenomenological, and cognitive (Perlman & Peplau, 1982). This study utilized the cognitive approach to understand loneliness as described in the research by Peplau & Perlman (1982). Their approach draws upon attribution theory to explain the role cognition plays in loneliness.

Loneliness is defined as "the unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively" (Perlman & Peplau, 1981, p. 31).

Loneliness is not synonymous with solitude or social isolation. Kubistat (1981) developed a schema for the phenomenon he calls aloneliness. This umbrella term encompasses the three concepts of solitude, aloneness, and loneliness. This investigator

Hackett and Weisman (1962) concurred with this observation. When an illness was fatal, clients' alienation turned to profound loneliness that was not reversible by medication.

The only direct study of loneliness found by this investigator was conducted by Dubrey and Terrill (1975). Fifty terminally-ill cancer clients were interviewed; fifteen subjects perceived themselves as lonely. The findings of this study indicated that clients may have misinterpreted the term loneliness. The interviewers observed that the clients were using the terms depression and loneliness interchangeably. Also the clients used the term loneliness to mean being separated from others, rather than as a feeling state.

In summary the majority of the past studies focused on the distress cancer clients experienced and identified the stages or mechanisms clients employed to cope with the diagnosis of cancer. The primary focus of these studies was not to identify the concept of loneliness in clients with cancer. The researchers incidently noted loneliness as existing in these clients but further exploration of this concept was not performed. The sole method used in these studies was interviews. A reliable, valid instrument to identify and measure loneliness was not used in any of the studies reported. All of these studies were conducted in an inpatient setting. Since the clients were removed from their customary environment and family, one must question if this variable had a possible effect on the research.

Weisman and Worden (1976) studied cancer clients during the first 100 days after they were informed of their diagnosis and treatment began. Weisman and Worden (1976) refer to these 100 days as the "existential plight" (p. 3) of cancer clients. Their use of this concept "refers to any severe emotional distress experienced during the first 100 days or so after cancer diagnosis and treatment" (p. 3). Interviews were conducted and tests were given to 120 newly diagnosed cancer clients. Although the researchers studied the vulnerability of these clients and how well they coped with their diagnosis, it was noted that these 100 days encompassed many fears. Abandonment and loneliness were two of the fears that agonized the clients very existence.

Hinton (1963) studied terminal illness and the amount of physical and mental distress clients experienced. The terminal stage was defined as that stage when the client has six months or less to live. Even though the terminal stage was studied without regard to a particular disease process, 80% of the terminal clients had a neoplastic disease. In this study a series of weekly informal interviews of hospitalized clients were conducted by observers. These nondirective interviews were occasions when clients could discuss whatever they wished. In the course of the interviews, the observers found that the clients were cheered by the mere companionship of the observer. The observers noted that the terminal client, even when surrounded by others, can "suffer great emotional isolation and deprivation" (Hinton, 1963, p.18).

disease. Freidenbergs, Gordon, Hibbard, and Diller (1980) reported the development of an instrument to assess the psychosocial problems of adult cancer clients. A structured problem-oriented interview was used and 122 cancer-related psychosocial problems were identified. Of these 122 items, 17 items related to interpersonal relationship difficulties with family members, significant others, and friends. Hackett and Weisman (1969) studied denial as experienced by clients with heart disease or cancer. They found that cancer clients experienced more staff-client relationship difficulties than the heart disease clients. Abrams (1974) wrote that persons with cancer experience interpersonal relationship conflict in all stages of cancer.

Much of the literature on loneliness in cancer clients was developed by studying people in two particular stages of cancer, the initial stage, when clients first learn of their definite diagnosis of cancer and the terminal stage when all possible efforts to halt the spread of cancer have failed and only palliative measures remain. It is important to remember that in these studies (Dubrey & Terrill, 1975; Hackett & Weisman, 1962; Hinton, 1963; Weisman & Worden, 1976) the specific concept of loneliness was not validated through research. It is merely stated that loneliness occurs in clients with the diagnosis of cancer who are in these particular stages. Observations or interviews of large numbers of hospitalized clients were used to arrive at the data from which the authors concluded that cancer clients were lonely.

Reactions and behavior of others to cancer clients is affected by two factors: their feelings toward cancer clients and their perception of how cancer clients should be treated (Wortman & Dunkel-Schetter, 1979). People have negative feelings about cancer and toward those with cancer. Although people feel they must be cheerful and optimistic around those with cancer, they actually may experience fear and aversion to the cancer client. This dichotomy may cause them to say one thing and act in another way. Avoidance of the client, avoidance of open discussion of issues important to the client, and discrepancy between verbal and nonverbal communication can send a confusing message causing distress at a time when there is a need for social support from others. Evasion by others may be interpreted by cancer clients as disinterest in their feelings. These negative cues can be internalized by those with cancer and cause them to feel hurt, rejected, and confused. Since these signs of rejection may be sent by many with whom these clients interact, they conclude that they are not loveable or not worthwhile to others. This disruption of social relationships can leave clients feeling isolated and doubtful of their self-worth. Ultimately, the self-doubt and isolation caused by severe disruption of the interpersonal relationships can enhance cancer clients' distress (Wortman & Dunkel-Schetter, 1979).

Studies indicated that cancer clients do experience difficulty in the area of interpersonal relationships as a function of their

it; and what to tell children, family, friends, and co-workers. These complex decisions must be made, often without prior experience in these areas. Thus, they do not feel confident that they have chosen the best alternative (Wortman & Dunkel-Schetter, 1979).

Uncertainties and profound fears experienced by cancer clients may increase their need for social support. One of the greatest fears cancer clients experience in the early stages of cancer is that they will be rejected and abandoned by their loved ones (Sutherland & Orbach, 1953; Weisman & Worden, 1976). In later stages of cancer, these clients fear that the physician will abandon them (Abrams, 1974; Milton, 1973).

Despite these intense needs for social support, clients may not express their feelings and fears. Mitchell and Glicksman (1977) found that clients thought it inappropriate to express emotional fears and concerns to the physician because they felt the physician was too busy; and if they did express these fears, the physician would react negatively towards them. Cancer clients also felt that talking about their fears and feelings about their illness would upset others (Wortman & Dunkel-Schetter, 1979). Therefore, clients may protect others, especially family members, who they feel are already overburdened by the illness (Harker, 1972; Schwartz, 1977). From the above evidence, it appears that some cancer clients' needs for social interactions are not met.

into a relationship with one or more health care professionals who are strangers and hold the client's life in their hands (Shands, Finesinger, Cobb, & Abrams, 1951).

Following the initial diagnosis and treatment, the anxiety and dread of dying dissipates. It is supplanted by a belief that everything will be all right. This belief that they have made it is experienced by clients even when they are told that their treatment was palliative, not curative (Schmale, 1976). When clients learn that cancer has recurred, all of the psychological wounds are reopened and the fears are experienced again. The worst possible thing that could happen has become a reality (Schmale, 1976).

Wortman and Dunkel-Schetter (1979) focused on the interpersonal relationships of the cancer client. Researchers discussed cancer clients' situation, the reaction of others to cancer clients and the behavior of others toward these clients. Persons with cancer experienced many profound fears and uncertainties. They questioned their ability to cope with this devastating diagnosis and the anticipated physical changes and problems, such as loss of body part, pain, continual nausea, hair loss, and disfigurement. If they feel they are coping, clients question whether they are coping adequately or poorly. Many vital decisions must be made once clients are diagnosed with cancer. These decisions range from what physician to choose; which hospital to enter; what treatment to have; whether to continue the treatment or abandon

Man is characteristically future-oriented (Shands, Finesinger, Cobb, & Abrams, 1951). He plans what he will do later in the day, the next day, the next week, the next year. He anticipates his yearly vacation and his retirement. These anticipations depend on the assumption that the person will be alive and healthy when these events occur. Most people act as if death were a remote and obscure idea; that death is not, for the most part, an inevitable event. The diagnosis of cancer changes many of one's attitudes toward life and the world. These changes in attitudes require an enormous effort to successfully integrate them. The enormity of this effort cannot be underestimated. For most people, it is impossible to successfully integrate this concept of cancer.

Therefore, they resort to defense mechanisms to cope with the diagnosis of cancer (Shands, Finesinger, Cobb, & Abrams, 1951). Because of this inability to cope successfully, use of defense mechanisms, such as denial, regression, and dissociation, can interfere with interpersonal relationships. When in a relatively healthy state, people have a fairly stable system of relationships which they depend on for support and they, in turn, support others. When cancer occurs in the life of these individuals, severe disruption in all relationships may occur. This is related to the unknown outcome of the illness and the need to adjust to several possible outcomes. Energy for adapting to the everyday problems becomes focused on adapting to the illness. They may enter

personality and interpersonal relationships of a person with cancer is appropriate.

Personality can be defined as "an organized structure of information, composed of the relationships existing within the individual and between the individual and the environment" (Shands, Finesinger, Cobb, & Abrams, 1951, p. 1160). A personality functioning satisfactorily is described as highly integrated. This allows for continual yet limited acquisition of new information while eliminating useless information. This processing occurs smoothly, but within definite limits for each individual (Shands, Finesinger, Cobb, & Abrams, 1951). Each individual's ability to cope depends on adequate personal preparation and effective solutions to problems as provided by one's cultural influence (M. Cohen, 1982). When these limits are exceeded, the person concerned is said to be distressed. This distress can be concealed or counterbalanced by defense mechanisms or coping mechanisms (Shands, Finesinger, Cobb, & Abrams, 1951).

When people hear that they have cancer, they often describe feelings of being "stunned", "dizzy", or "dazed" (Shands, Finesinger, Cobb, & Abrams, 1951, p. 1160). This idea of having cancer has a powerfully disruptive effect on their personality. At first, the words "I have cancer" exceed the limits of tolerance for new information. To integrate this new concept, enormous changes must take place.

differences in loneliness between groups of cancer clients at various stages of illness.

Review of Literature

When persons are diagnosed with cancer, they experience physical, psychological and socioeconomical stress. This stress invades every aspect of one's life. It disrupts personal functioning, financial stability, the ability to work, family and marital relationships, social relationships, spiritual values, and the life style that was attained or hoped to be attained.

Research into the psychosocial aspects of persons with cancer has been meager despite awareness by the health care community of the tremendous impact this diagnosis has upon individuals and their family. J. Cohen (1982) suggested that cancer research interventions are aimed at the biological basis for curing cancer rather than the ' "palliative" ' (p. 111) interventions needed to manage the psychological and social problems associated with cancer.

Studies demonstrated various psychosocial problems for the individual with cancer. Most of the research literature has dealt with the person dying of cancer rather than the person who was recently diagnosed, or in remission or recently told that cancer has recurred. To understand the derivation of psychosocial problems, a brief discussion of the changes that occur in the

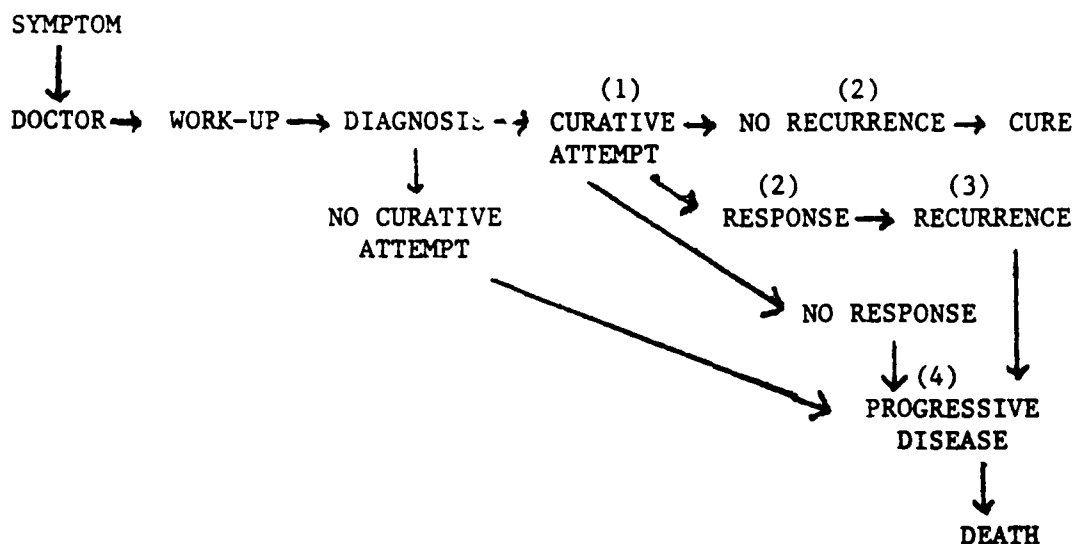


Figure 2. Clinical Courses of Cancer. Holland, 1973, p. 995.

Statement of the Problem

Will clients, representing four stages of cancer, manifest loneliness as measured by the Revised UCLA Loneliness Scale?

How will these clients by stages compare on loneliness?

Purpose of the Study

Prior research indicated that cancer clients experience difficulty in their interpersonal relationships as a function of their disease process (Freidenbergs, Gordon, Hibbard, & Diller, 1980; Hackett & Weisman, 1969). Weisman and Worden (1975) noted longer survival rates among cancer clients who maintained close, intimate relationships with family and friends.

The purpose of this study was to determine if cancer clients at various stages of illness experience loneliness and the

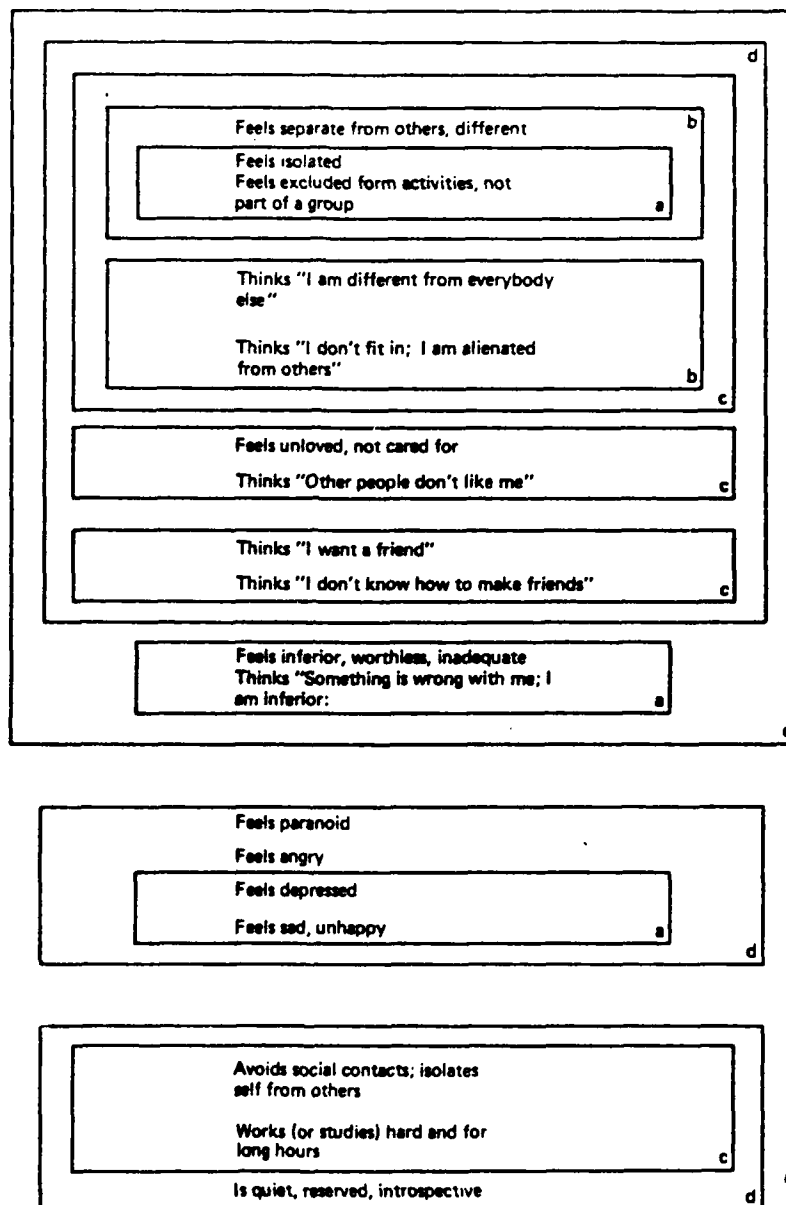


Figure 1 Prototype of a lonely person. Strength of cluster: (a) .71-.90; (b) .51-.70; (c) .31-.50; (d) .11-.30; (e) .01-.10.

From: Horowitz, French, & Anderson, 1982, p. 188.

To understand loneliness, Peplau and her associates (Peplau, Miceli, & Morasch, 1982; Peplau & Perlman, 1979; Peplau, Russell, & Heim, 1979; Perlman & Peplau, 1981) utilized the cognitive-discrepancy model of attribution theory, which is based on the theoretical work of Weiner (1974). Attribution theory assumes that by understanding the idea behind why people do the things they do, one can better predict the behavior and emotional reactions of people. Attribution process is conceptualized as one in which a person first observes an event. This event can be the person's behavior toward an object or one's behavior in a social environment. Or it can be success or failure of a task or the outcome of a life event. Then, based on the available information the person has about the event and the background or motivational factors of the individual, one develops a cognition about why this event occurred. Presumably the person's reaction to an event is affected by attributions made about the cause of the event (Frieze & Bar-Tal, 1979).

People use affective, behavioral and cognitive cues to label themselves as lonely. Although the behavioral and affective elements contribute to the overall self-diagnosis of loneliness, these cues are not sufficient. Cognitive cues, such as desiring more frequent or intimate interactions with others because the person is alone too often, may lead the person to a self-diagnosis of being lonely. The prototype developed by Horowitz, French and Anderson (1982) identified clusters of

feelings, thoughts, and behaviors of persons who can be labelled as lonely. These cognitive elements are important in cognitive-discrepancy models. These elements focus on subjective standards and perceptions. Cognitive-discrepancy models define loneliness "as a response to the perception that one's social relations fail to measure up to some internal yardstick" (Peplau, Miceli, & Morasch, 1982, p. 137). This definition of loneliness focuses on how individuals perceive and evaluate their social life, not how "outside observers" assess it (Peplau, Miceli, & Morasch, 1982, p. 137).

Peplau, Russell, and Heim (1979) stated that people who are lonely want to identify what is the cause of their loneliness. The initial step in predicting, controlling and eventually eliminating loneliness is to understand the origins of loneliness. One's own explanation for the cause of loneliness can have important effects on self-esteem, future expectancies, coping behaviors and affective reactions.

Personal accounts of people experiencing loneliness have been studied. The accounts had three distinct but interrelated parts. The first is "precipitating events" (Peplau, Russell, & Heim, 1979, p. 57) which are those events which lead to the onset of loneliness. The precipitating events can be actual changes in the person's social life or a change in the desired level of interaction. The person's achieved level can be reduced by the termination of a close relationship, physical separation from

family and friends, changes in status and dissatisfaction with the quality of one or more relationships (Peplau & Perlman, 1979). Other precipitating events can be a change in the desired level of social interaction without an accompanying change in the actual achieved level of social interaction. Social norms, particular stage in the life cycle (Peplau & Perlman, 1979), seasons of the year (Wenz, 1977), and physical environment changes (Peplau & Perlman, 1979) influence the desire for social contact.

The second element of personal accounts that have been studied is "maintaining causes" (Peplau, Russell, & Heim, 1979, p. 57). These are "those factors which prevent the person from achieving a satisfactory social life" (Peplau, Russell, & Heim, 1979, p. 57). Maintaining causes are characteristics of the person or situation. Personal characteristics such as shyness, low self-esteem, lack of social skills and physical unattractiveness may increase the likelihood of loneliness in a person (Peplau & Perlman, 1979).

The final element of personal accounts that have been studied is the anticipated solution to alleviate the person's loneliness. People who are lonely usually have an idea or plan to alleviate this loneliness. It can include joining a club where the person would meet others with similar interests or it can be adapting oneself to the solitude (Peplau, Miceli, & Morasch, 1982).

Because self-analysis of the origin of one's loneliness is not usually precise, one may attribute several reasons for being lonely. The person may attribute loneliness to a particular physical characteristic, such as a hair color or style of clothes. They may then institute changes and re-evaluate the cause of their loneliness.

Weiner, Russell, and Lerman (1978) developed three dimensions to analyze the causes of loneliness: locus of causability, stability and controllability. The locus of causability may be internal or personal versus external or situational (Perlman & Peplau, 1981). Internal causes would include lack of effort or being unattractive. Examples of external causes would be bad luck or rejection by others (Peplau, Russell, & Heim, 1979). Speculation exists that people have a tendency to blame themselves for their loneliness. Self-blame is related to shame and a reluctance to reveal one's problems to others (Peplau, Russell, & Heim, 1979).

The second dimension is stability (Peplau & Perlman, 1979). Stable causes are unchanging factors in the situation or individual's personality. Unstable causes are changeable factors, such as luck and amount of effort exerted by the person (Peplau, Russell, & Heim, 1979). When loneliness is attributed to stable causes, there is a lowered expectancy of future social relationships as well as increased pessimism and hopelessness (Peplau, Russell, & Heim, 1979).

Controllability is the third dimension. This concerns whether or not a person sees himself as having control over the causes of loneliness. Unstable factors that an individual could purposefully change are controllable causes. Amount of effort exerted is an example. Uncontrollable factors are those in which the person is unable to influence as the causes of loneliness. Personality, an internal factor, and the external characteristics of the individual's social environment are example of uncontrollable causes. Central to the concept of loneliness is one's ability to control social relationships. This is eessential in maintaining a satisfactory balance between achieved and desired level of social interaction. Failure to maintain this balance is described as loneliness. To maintain or reinstate the balance in social relations, people control the events that precipitate loneliness or exercise control over the factors that maintain the causes of loneliness. Thus loneliness can be reduced when people increase their personal control over events (Peplau, Russell, & Heim, 1979).

Peplau, Russell, and Heim (1979) have developed a set of predictions about the outcomes of causal attribution for loneliness. They predict that hopelessness will be a characteristic of those persons who attribute their loneliness to stable causes. Those who attribute their loneliness to unstable causes will show a greater hope that there will be an end to their loneliness. If loneliness continues over a long period of time,

the causes of loneliness become a stable factor; less optimism about the end of loneliness occurs. Those lonely individuals who demonstrate feelings of anger and hostility are representative only of those who attribute their loneliness to external causes. Those who attribute their loneliness to internal causes have feelings of shame, guilt or embarrassment, and have a low self-esteem. Depression or a depressed affect will be associated with loneliness when the causes are internal and stable.

Peplau, Russell, & Heim (1979) have also predicted how people cope with their loneliness using the three dimensions mentioned earlier. Those who ascribe their loneliness to internal, unstable causes develop motivation and active coping behavior in order to decrease their loneliness. When individuals ascribe the causes of their loneliness to stable factors, they become passive and become socially withdrawn. If persons are actively attempting to cope with loneliness but are unsuccessful, they may attribute their loneliness to stable causes and also become passive and socially withdrawn.

In this study the researcher, applying the elements of the cognitive-discrepancy model of attribution theory, attempted to determine if clients who have cancer are also lonely. Clients with cancer have several "precipitating events" (Peplau, Russell, & Heim, 1979, p. 57) that can influence the development of loneliness. The initial diagnosis of cancer usually involves immediate or continued

hospitalization and thus separation from family and friends. If friends and family do not visit these clients frequently or the visitors' behavior demonstrate uneasiness or aloofness in the presence of these clients, the clients may become dissatisfied with these relationships. This may be particularly true for those clients with cancer who have disfiguring surgery. The cancer clients' need for intense social support was previously mentioned (Wortman & Dunkel-Schetter, 1979). Certainly, cancer clients may experience changes in their role within the family. Wives become the main support of the family when the husbands are unable to work. Wives also may become the authority figure or the main disciplinarian within the family, so husbands will not be disturbed and are protected from family matters. Wives who have cancer may not retain the "mother" role within the family. Husbands or maybe an older child may assume some of these "mother" duties, such as preparing meals and cleaning the home.

A maintaining cause for loneliness in cancer clients can be the disease process itself. M. Cohen (1982) stated that once clients have been diagnosed as having cancer, this fact is "never forgotten by themselves, their families or friends and this pronounces the cancer patient mysteriously and permanently flawed" (p. 121). Another maintaining cause may be the disfigurement as a result of surgery. This would include not only those clients who had ear, nose and throat surgery, but those with mastectomies, colostomies, and amputation. This end result of surgery may

cause clients to view themselves as unattractive to themselves, their families and friends. The word cancer itself has a negative connotation. Being considered "unclean" and "contagious" can bring shame to the cancer client.

These precipitating and maintaining events can be analyzed using the three dimensions of locus of causality, stability and controllability. Cancer can be viewed by clients as an internal or an external locus of causality. Abrams and Finesinger (1953) indicated that half of the sixty clients in their study blamed themselves for having cancer. Usually they attributed the cancer to their own past deeds or a part of their personality. Thus, cancer becomes an internal cause of loneliness. Rejection by friends and family members, as well as hospitalization for treatment of the cancer are external causes of loneliness.

During the disease process, cancer can be viewed as stable or unstable. Cancer can be an unstable cause of loneliness if remission occurs, because a change has transpired. If there is no remission or if the cancer recurs, cancer becomes a stable cause of loneliness. Frequently hopelessness is reported to be an outcome for stable causes (Peplau, Russell, & Heim, 1979), thus the clients in these stages are prone to loneliness. Gordon (1976) states that "hopelessness is part of the vicious cycle of loneliness" (p. 28).

The final dimension is control over the causes of loneliness. If clients with cancer decide to undergo treatment to eradicate

the cancer, they must have one or a combination of treatment modalities such as surgery, chemotherapy, radiation therapy, or immunotherapy (Burns, 1982). At the present time clients can do little themselves to arrest the biological course of the cancer. Other than taking medication and keeping scheduled appointments, clients can exercise little control over the progression of the disease.

Clients may have little influence on the feelings of others and their attitudes about cancer. Friends and family members may have negative views and then avoid cancer clients. This lack of social interaction with others is another example of no control.

Hospitalization, the rigid "routines", the assignment of cancer clients to private rooms or a room at the end of the hall are other examples of causes of loneliness. The avoidance behavior demonstrated by hospital staff to cancer clients is frequently mentioned in cancer literature (Abrams, 1974; Burns, 1982; Milton, 1973). This is certainly one area over which clients have little control.

Roles within the family often become jeopardized when clients have cancer. This may be especially true during hospitalizations, physical illnesses following chemotherapy or radiation therapy, and during occasions when clients lack physical strength to carry out their normal household duties. Someone else within the family assumes these roles. They may not relinquish them when

clients have improved because they want the clients "not to worry" or "save their strength".

Clients with cancer may feel unattractive to others, especially those with disfiguring surgery. This is a controlling cause of loneliness as clients may be able to modify their own thoughts and actions regarding how they view themselves.

In a remission, clients may feel they have control over the cancer and their lives. This can occur if chemotherapy is administered on an outpatient basis, or the clients have finished a course of chemotherapy, or the follow-up scans and tests show no further evidence of cancer. Clients can feel a renewed control over their lives and return to their former roles within their family and within society.

The predictions made by Peplau, Russell, and Heim (1979) indicate cancer clients can be characterized as lonely people. This is particularly true when these clients view cancer as an internal cause of loneliness which is stable.

Hypotheses

Cancer clients may live in a social environment that is conducive to loneliness. The hypotheses for this research study are: 1) clients with cancer do experience loneliness, and 2) there will be a significant difference in the degree of perceived loneliness experienced by clients in four different stages of cancer.

Definition of Terms

Cancer - ". . . a large group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled or checked, it results in death." (American Cancer Society, 1983, p. 3).

Initial - The stage when cancer has been diagnosed and treatment, either surgical or medical, has begun. Less than 100 days have elapsed since the client was diagnosed. The cancer is limited to the primary site and metastasis is not evident.

Remission - The stage when cancer has been diagnosed for five months but less than five years and there is no evidence of recurrence.

Recurrence - The stage when the cancer of the primary site has spread to another part or parts of the body. This metastasis was not present upon initial diagnosis.

Terminal - The stage wherein the cancer disease process is considered irreversible and the treatment prescribed is only palliative.

Primary site - The original location of the cancer.

Metastasis - "Movement of . . . body cells (especially cancer cells) from one part of the body to another: change in location of a disease or of its manifestations or transfer from one organ or part to another not directly connected" (Taber's Cyclopedic Medical Dictionary, 1977, p. M-41).

Loneliness - The discrepancy between the desired and achieved levels of social interaction (Peplau & Perlman, 1979).

CHAPTER TWO

METHODOLOGY

Overview of Design

After validating that loneliness existed among cancer clients, this descriptive study compared the degree of perceived loneliness in groups of cancer clients in four different stages of cancer. Each group consisted of clients in the same stage of illness. The first three groups had 12 clients (N=12) and the fourth group had 11 clients (N=11). The four stages of cancer represented the independent variable. Loneliness, as measured by the Revised UCLA Loneliness Scale, was the dependent variable.

Instrumentation

The instrument, entitled Personal Experience Survey for this research, was the Revised UCLA Loneliness Scale (Appendix A) developed by Russell, Peplau and Cutrona (1980). This 20-item scale consisted of 10 positively worded statements reflecting satisfaction with social relationships and 10 negatively worded statements reflecting dissatisfaction with social relationships (Russell, Peplau, & Cutrona, 1980). These statements were randomly listed on the instrument.

The total score was the sum of the 20 items. The scores may range from 20 to 80. The score on statements 1, 4, 5, 6, 9, 10, 15, 16, 19 and 20 were reversed prior to scoring the scale. In

order to facilitate interpretation of the scores in this research four subgroups of score ranges were arbitrarily divided by the researcher. Twenty to 34 indicated a low degree of loneliness, 35 to 49 a moderate degree, 50 to 64 a moderately high degree of loneliness, and 65 to 80 a high degree.

This instrument has an internal consistency of .94 as estimated by alpha coefficient. Concurrent validity was confirmed by subjects who reported experiencing emotions theoretically linked to loneliness and not reporting emotions unrelated to loneliness. These presumably lonely subjects also reported having limited social relationships and involvement in fewer social activities than presumably nonlonely subjects in the study (Russell, Peplau, & Cutrona, 1980).

The discriminant validity of this scale was examined when previous studies indicated substantial correlations between loneliness scores, the Beck Depression Inventory and Coppersmith's Measure of Self-Esteem (Jones, Freemon, & Goswick, 1981). The original UCLA Loneliness Scale, along with 10 positively worded statements concerning loneliness were administered as well as seven measures of mood and personality. The Beck Depression Inventory measured depression, the State-Trait Anxiety Inventory assessed state anxiety, and self-esteem was measured by the Texas Social Behavior Inventory. To assess approach and avoidance orientations toward social relationships, the Affiliative Tendencies and Sensitivity to Rejection measures were included. The Marlowe-Crowne Social Desirability Inventory was administered to measure

CHAPTER FOUR

SUMMARY AND RECOMMENDATIONS

Summary

This exploratory research project studied loneliness in clients in four stages of cancer. The purpose was to determine if cancer clients at various stages of illness experience loneliness and the differences in the degree of loneliness between groups of cancer clients at various stages of illness. Forty-seven clients (21 males and 26 females) participated in the study: 12 in the initial diagnosis stage, 12 in the remission stage, 12 in the recurrence stage and 11 in the terminal stage. The Revised UCLA Loneliness Scale was administered to measure the clients' loneliness.

Two hypotheses were proposed for this study: clients with cancer would experience loneliness and that there would be a significant difference in the degree of perceived loneliness experienced by clients in four different stages of illness. The first hypothesis was supported as the mean scores, score ranges, and distribution of the scores indicated that cancer clients do experience loneliness. A moderate degree of loneliness was found in the mean score of clients who were initially diagnosed with cancer. Selected clients in all four stages of cancer (34%) did have survey scores indicating moderate to moderately high degrees of loneliness. Another 11% of the participants had borderline scores of 32 to 34.

The clients in the 70 to 79 age range also experienced a moderate amount of difficulty with the Likert-type scaling for their responses. Many clients wanted to answer the questions with a "yes" or a "no". When assisting with responses to the questionnaire, this researcher frequently had to reemphasize the differentiation for the responses to these clients. This may account for some of the low scores in the age range.

Each stage had selected clients with scores in the moderate, moderately high and borderline low to moderate categories of loneliness. Sixty-seven percent of the loneliness scores were noted in clients who ranged in age from 60 to 69, who comprised only 38% of the total subjects. None of the demographic characteristics seemed to explain the range of loneliness scores in this 60 to 69 year age group.

The clients for this survey were willing to participate, even though none had ever participated in a nursing research project before. Perhaps one terminal client summed it up best when she said, "I'm glad someone is doing it. One cannot go through this alone. We all need someone to care about us."

discussion of cancer by clients in Stages 2, 3 and 4 may be indicative of how willingly they talk with others about cancer when someone is available to listen.

The researcher asked if clients were actively involved with any organizations, such as church groups, fraternities, bridge clubs, or social clubs. Those who said they did not frequently stated that they were no longer active because of the cancer and its effect on their physical strength. The finding in the Pearson correlation coefficient was that clients who did not belong to any organizations were more lonely than those who did. Fifty-five percent of the clients surveyed were active members of organizations. Of the 45% who were not actively involved in any organizations, 67% of these clients had survey scores of 32 or higher.

The low degree of perceived loneliness demonstrated by the clients in the 70 to 79 year age range may be influenced by the simple fact of their age. Although none of these clients stated they were "ready to die", three clients stated it was better for them to have the cancer because they had "lived their life" as opposed to a child having cancer who was "beginning their life". Many of these clients expressed satisfaction with their life and stated they had relatively few regrets. Additionally, 69% of clients in this age range were active in organizations. Particularly noted, was the frequency (54%) these clients mentioned belonging to a church or Senior Citizen group.

spoke of their close relationship and reliance upon family members for support during this crisis in their lives. Children, grandchildren and spouses were often reported by clients to be very caring and open during discussions about the clients' cancer. The researcher did not request data regarding the clients' social support network or the proximity of the person with whom they could share their innermost fears, concerns and thoughts. This close social network could be an influencing factor in the degree of loneliness noted in these clients. Clients also mentioned their faith in God. Frequently they stated that their faith was sustaining them during this long disease process.

The researcher hypothesized that there would be a significant difference between the degree of loneliness and the stages of cancer. Although this is not substantiated by the survey results, the researcher noted that during the data collection interviews clients in Stages 2, 3 and 4 were more talkative about their disease process and how it personally affected them and their family. Only three clients in Stage 1 talked about five minutes with the researcher when the survey was completed. In Stage 2 58% of the clients talked with the researcher for 10 minutes or more. Fifty percent of the clients in Stage 3 talked with the researcher with one client talking for an hour after the survey was completed. In Stage 4 63% of the clients talked with the researcher from 10 to 30 minutes after the survey. This open

	Age	Sex	Membership in Organizations	Married
Loneliness Scores	-0.1323 (47) p=0.188	-0.0420 (47) p=0.390	0.2848 * (47) p=0.026	0.1286 (47) p=0.195

* $p > .05$

Table 5. Pearson Correlation Coefficient of Loneliness Scores and Demographic Data.

Additional Findings

Further study of the demographic data revealed two serendipitous findings. Eighteen (38%) of the clients surveyed ranged in age from 60 to 69 years old. Of these 18 clients, 11 (77%) of them had scores of 32 or higher. Although a score of 32 was arbitrarily placed in the low degree of loneliness category, it is a score between a low and moderate degree of loneliness. The second finding was that 13 clients was 70 to 79 years old. Eighty-four percent of those surveyed in this age range had a score of 30 or less.

Discussion of Findings

This study was conducted in two hospitals and an office in two midwestern towns. The hospitals, where 92% of the clients were surveyed, were located in a midwestern town surrounded by small family-owned farms and light industry firms. Many clients

Hypotheses Considered

The first hypothesis advanced for this exploratory research was that clients with cancer do experience loneliness. This hypothesis was supported by the descriptive data in Table 3. The figures in Table 3 addressed earlier indicate that those clients in Stage 1 did experience a greater degree of loneliness than the other clients. Although the mean of the scores in Stage 4 clients is 33, it is a score between the low and moderate degree of loneliness defined in this study. This score indicates that loneliness does exist in this group as a whole. The range of scores in Stages 1, 3 and 4 reveal that selected clients do experience a moderate to moderately high degree of loneliness while other clients in the same group have little to no loneliness.

The second hypothesis proposed was that there would be a significant difference in the degree of perceived loneliness experienced by clients in four different stages of cancer. There was no significant difference in the degree of loneliness among groups at the 0.05 level as indicated in Table 4. Because there was not a significant difference between any of the groups, a Pearson correlation coefficient was done. The results, as shown in Table 5, reveal that the only significant relationship between the dependent variable of loneliness and selected demographic characteristics is membership in organizations.

Scores for the subjects are presented in Table 3. The subjects in Stage 1 had a higher mean score than the other three stages. This mean score of 36 indicated this group of clients as a whole had a moderate degree of loneliness.

	Stage 1	Stage 2	Stage 3	Stage 4
Score range	25-59	20-43	22-55	20-51
\bar{X} score	36	29	31	33
S. D.	9.6954	7.5010	10.1932	9.5603

Table 3. Score Range, Means and Standard Deviation of Loneliness Scores across the Four Groups.

The one-way ANOVA is presented in Table 4. The F ratio of 1.360 indicated there was no significant difference among the groups.

Source of Variance	df	Sum of Squares	Mean Squares	F ratio
Between groups	3	352.1239	117.1746	1.360
Within groups	43	3709.9572	86.2752	

$p > .05$

Table 4. One-way ANOVA of Loneliness Scores.

	Stage 1	Stage 2	Stage 3	Stage 4
N	12	12	12	11
Male	4	6	5	6
Female	8	6	7	5
Age Range	20-73	41-77	23-78	51-79
Age \bar{X}	62	62	56	66

Table 1. Sex and Age of Subjects

Table 2 presents the distribution of the loneliness scores across the four groups. Fifty-eight percent of the scores for Stage 1 clients are in the 30 to 39 score range. In Stages 2 and 3, 67% of the scores are in the 20 to 29 range. The scores in Stage 4 clients are not predominantly in one score range.

Loneliness Scores		Stage 1	Stage 2	Stage 3	Stage 4
Low Loneliness	20-24	1	4	4	3
	25-29	1	4	4	1
	30-34	4	1	1	2
Moderate Loneliness	35-39	3	2	1	2
	40-44	1	1	0	2
	45-49	1	0	1	0
Moderately High Loneliness	50-54	0	0	0	1
	55-59	1	0	1	0
	60-64	0	0	0	0

Table 2. Distribution of Subjects' Loneliness Scores

CHAPTER THREE

FINDINGS

Description of the Sample

This nurse researcher surveyed 47 clients (21 males and 26 females), 12 in the first three stages (N=12 in each group) and 11 in the last stage (N=11). Ten potential subjects did not participate in the research project. Of those who refused, four were in the initial stage, two in the recurrence with metastasis and four in the terminal stage. All of the subjects in the terminal stage and one in the recurrence stage refused because they were not feeling well enough to participate. The researcher subsequently learned that three of these subjects were admitted to a hospital within 24 hours after the request to participate. In the initial stage, one refused to sign the Acknowledgement of Consent form but would complete the survey, two did not give reasons, and one, who used oxygen from a portable tank, did not have an adequate supply of oxygen to participate in the study and complete the drive to her home. The other potential subject in the recurrence stage "didn't want to get involved" in the study.

Demographic data about the subjects is given in Table 1. Forty-seven percent of the clients surveyed were male. Each group had a wide range of ages, however the range of the mean ages of the four groups was 56 to 66.

1. The researcher used a convenient, volunteer sample of cancer clients. The size of the sample does not allow the results to be generalized to the general cancer client population.

2. The sample was restricted to clients receiving outpatient medical treatment in three facilities in the same geographical, cultural area. The results cannot be generalized to clients in inpatient status or in metropolitan cities in different geographical, cultural areas.

3. The researcher did not determine the pre-morbid degree of loneliness experienced by the clients prior to the diagnosis of cancer. A comparison of the pre-morbid and post-diagnosis scores of clients in the four stages would determine if cancer has any affect on clients' loneliness.

4. The researcher did not determine the client's coping pattern. A comparison of coping patterns and loneliness scores could determine if there is any relationship between these two variables.

5. The researcher did not determine the client's social support network. A comparison of social support network and loneliness scores could determine if there is any relationship between these variables.

6. The researcher did not determine the degree of loneliness in clients with similar demographic characteristics who do not have cancer.

completion of the survey each client was thanked for their cooperation and participation.

Data Analysis

The total sum of points for each client taking the Revised UCLA Loneliness Scale were entered on the Demographic Data form (Appendix D). Upon completion of the data collection, these scores as well as age, sex, marital status, and membership in organizations for each client were entered into a SPSS program in a mainframe computer. The means and a one-way analysis of variance (ANOVA) were done to determine if clients in four stages of cancer experienced loneliness, and if there was a significant difference in the degree of loneliness within groups. At the onset of this study, this researcher proposed to do a Tukey test if there was a significant difference ($p > .05$) in the degree of loneliness among clients in the four stages of illness. However, the overall F was not significant. Therefore, a Pearson correlation coefficient was done to determine if there was any relationship between loneliness scores and selected demographic characteristics. A crosstabulation of loneliness scores and age, sex, marital status, and membership in organizations was done.

Limitations

This study on loneliness in cancer clients has these limitations:

receptionists that they were present for their scheduled appointment or after they received their radiation therapy. The office or department personnel introduced the clients to the researcher. The researcher then asked the clients if they would participate in a research project that would take approximately 10 to 15 minutes of their time. If the clients agreed to talk with the researcher, they were escorted to a quiet, environmentally controlled, private room within the facility. The researcher explained who she was and why clients were asked to participate in the study. Prior to obtaining verbal and written consent, the researcher emphasized that participation was voluntary and their names and survey results would be kept confidential. Upon receiving the client's verbal consent, written consent (Appendix C) was obtained, again emphasizing voluntary participation and confidentiality of their name and results. Personal data was requested and appropriately entered on the Demographic Data form (Appendix D). The directions for completing the survey were given. The clients were provided the opportunity to review the survey to ensure they understood how to complete it. The researcher left the room and waited in the corridor telling the clients where she would be if they needed further assistance. If clients were unable to read the survey because they did not have their glasses with them, the researcher read the statements to them and they, in turn, circled the appropriate number. Upon

illness, an ability to read and understand the directions and statements of the survey, cognizance of their diagnosis of cancer and diagnosed as being in one of the four stages of cancer identified by the researcher. The stages were: within 100 days of initial diagnosis without metastasis, in remission without evidence of metastasis, recurrence with evidence of metastasis, and terminally-ill with widespread metastasis and receiving only palliative treatment.

The stage of illness was assessed by screening the medical record of each client. The researcher particularly noted any recent hospitalization discharge summaries, reports of operations, pathology reports and radiology reports. If the stage of illness was not clearly evident to this researcher, further clarification was sought from the office or department personnel or the physician. The first 12 subjects within each stage of illness who met the criteria and agreed to participate were asked to complete the Revised UCLA Loneliness Scale.

Data Collection Procedure

Prior to the beginning of this research, letters asking for permission to give the survey to their clients were sent to one oncology physician and two radiation oncologists. Verbal permission to conduct this research was given. Subjects who met the criteria were approached to participate in this study after they informed the physician's receptionist or department

social desirability, the Introversion-Extroversion Scale assessed respondent introversion and extroversion and the Lie Scale assessed whether the respondents distorted their answers. The last scale administered was the Assertiveness Scale which measured the individual's assertiveness. The results indicated that the Revised UCLA Loneliness Scale correlated highly with other measures of loneliness rather than other mood or personality measures (Russell, Peplau, & Cutrona, 1980).

Permission to use this scale was granted by Dr. L. A. Peplau of the University of California in Los Angeles (Appendix B).

Sampling Plan

This study was conducted in the office of one oncology physician and two hospital outpatient radiation therapy departments located in two midwestern suburban communities with a population of about 40,000. The group was predominantly white, English-speaking, and American. Their socioeconomic level ranged from poor to high-middle class. The level of education for these subjects ranged from grade school to advanced college level.

The subjects of this study were a convenient, volunteer sample from physicians' clientele who had a diagnosis of cancer and had appointments with the physicians or appointments for radiation therapy. The primary site of the cancer was disregarded for this study. Criteria essential for selection were: 18 years of age or older, alert and oriented, no concurrent psychiatric

The second hypothesis was to determine if there was a significant difference in loneliness between clients in the four stages of illness. A one-way ANOVA was used to test the significance of this hypothesis at the .05 level. The second hypothesis was not supported. Pearson correlation coefficient revealed that a higher degree of loneliness occurred in clients who were not actively involved in organizations.

Eighteen (38%) of the clients were in the 60 to 69 year age range. Seventy-eight percent of these clients had a score of 32 or higher, indicating a greater degree of loneliness in this age group. Thirteen (27%) of the clients were in the 70 to 79 year age group. Eighty-four percent of these clients had scores of 30 or less indicating a low degree of loneliness.

Recommendations

Future studies on loneliness in cancer clients should consider the following recommendations.

1. The sample size should be increased to 30 in each group to enhance the variations that would be represented in each group. The subjects should live in a large metropolitan area, possibly outside the midwest, to determine if the rural versus urban environment impacts on the degree of loneliness. Other variations that should be included are blue-collar and white-collar workers and different ethnic groups to ascertain if these factors influence the degree of loneliness experienced by clients with cancer.

2. A coping scale should be administered in addition to the loneliness scale to determine if there is a relationship between coping ability and the degree of loneliness.

3. The demographic data sheet should include information regarding the social support network of the clients. This data should be correlated with the loneliness score to determine the significance of social support network with the client's degree of loneliness.

4. Further study of cancer clients in the 60 to 69 year age group and the 70 to 79 year age group should be done to determine if these age groups actually experience a dissimilar degree of loneliness.

5. A series of longitudinal studies of cancer clients should be done to determine if their degree of loneliness changes as they progress through the course of illness, from the pre-morbid stage to the terminal stage.

REFERENCES

- Abrams, R. D. (1974). Not alone with cancer. Springfield, IL: Charles C. Thomas.
- Abrams, R. D., & Finesinger, J. E. (1953). Guilt reactions in patients with cancer. Cancer, 6(5), 474-482.
- American Cancer Society. (1983). Cancer facts and figures 1984. New York: Author.
- Bahnson, C. B. (1975). Psychologic and emotional issues in cancer. Seminars in Oncology, 2(4), 293-309.
- Barckley, V. (1967). The crisis in cancer. American Journal of Nursing, 67(2), 278-280.
- Burns, N. (1982). Nursing and cancer. Philadelphia: W. B. Saunders Company.
- Cohen, J. (1982). Response of the health care system to the psychosocial aspects of cancer. In J. Cohen, J. W. Cullin, & L. R. Martin (Eds.), Psychosocial aspects of cancer. New York: Raven Press.
- Cohen, M. M. (1982). Psychosocial morbidity in cancer: a clinical perspective. In J. Cohen, J. W. Cullin, & L. R. Martin (Eds.), Psychosocial aspects of cancer. New York: Raven Press.
- Creech, R. H. (1975). The psychologic support of the cancer patient: a medical oncologists viewpoint. Seminars in Oncology, 2(4), 285-292.

- Dubrey, R. J., & Terrill, L. A. (1975). The loneliness of the dying person: an exploratory study. Omega, 6(4), 357-371.
- Fischer, C. S., & Phillips, S. L. (1982). Who is alone? Social characteristics of people with small networks. In L. A. Peplau & D. Perlman (Eds.), Loneliness. A sourcebook of current theory, research, and therapy (pp. 21-39). New York: John Wiley and Sons.
- Freidenbergs, I., Gordon, W., Hibbard, M. R., & Diller, L. (1980). Assessment and treatment of psychosocial problems of the cancer patient: a case study. Cancer Nursing, 3, 111-119.
- Frieze, I. H., & Bar-Tal, D. (1979). Attribution theory: past and present. In I. H. Frieze, D. Bar-Tal, & J. S. Carroll (Eds.), New approaches to social problems: applications of attribution theory. San Francisco: Jossey-Bass Publishers.
- Gordon, S. (1976). Lonely in America. New York: Simon & Schuster.
- Hackett, T. P., & Weisman, A. D. (1962). Treatment of dying. Current Psychiatric Therapy, 2, 121-126.
- Hackett, T. P., & Weisman, A. D. (1969). Denial as a factor in patients with heart disease and cancer. Annals New York Academy of Sciences, 163(4), 802-811.
- Harker, B. L. (1972). Cancer and communication problems. Psychiatry in Medicine, 3, 163-171.

- Hinton, J. M. (1963). The physical and mental distress of the dying. Quarterly Journal of Medicine, 125, 1-21.
- Holland, J. (1973). Psychological aspects of cancer. In J. Holland & E. Frei (Eds.), Cancer medicine (pp. 991-1021). Philadelphia: Lea & Febinger.
- Horowitz, L. M., French, R. S., & Anderson, C. A. (1982). The prototype of a lonely person. In L. A. Peplau & D. Perlman (Eds.), Loneliness. A sourcebook of current theory, research, and therapy (pp. 183-205). New York: John Wiley & Sons.
- Jones, W. H., Freeman, J. E., & Goswick, R. A. (1981). The persistence of loneliness: self and other determinants. Journal of Personality, 49(1), 27-48.
- Krumm, S. (1982). Psychological adaptation of the adult with cancer. Nursing Clinics of North America, 17(4), 729-737.
- Kubistant, T. M. (1981). Resolution of aloneliness. The Personnel and Guidance Journal, 59(7), 461-465.
- Mastrovito, R. C. (1974). Cancer: awareness and denial. Clinical Bulletin, 4, 142-146.
- Milton, G. W. (1973). Thoughts in mind of a person with cancer. British Medical Journal, 4, 221-223.
- Mitchell, G. W., & Glicksman, A. S. (1977). Cancer patients: knowledge and attitudes. Cancer, 40(1), 61-66.
- Motustakas, C. E. (1961). Loneliness. New York: Prentice-Hall, Inc.

- Peplau, L. A., Miceli, M., & Morasch, B. (1982). Loneliness and self-evaluation. In L. A. Peplau & D. Perlman (Eds.), Loneliness. A sourcebook of current theory, research, and therapy (pp. 135-151). New York: John Wiley & Sons.
- Peplau, L. A. & Perlman, D. (1979). Blueprint for a social psychological theory of loneliness. In M. Cook & G. Wilson (Eds.), Love and attraction (pp. 101-110). Oxford: Pergamon Press.
- Peplau, L. A., Russell, D., & Heim, M. (1979). The experience of loneliness. In I. H. Frieze, D. Bar-Tal, & J. S. Carroll (Eds.), New approaches to social problems: applications of attribution theory. San Francisco: Jossey-Bass Publishers.
- Perlman, D., & Peplau, L. A. (1982). Theoretical approaches to loneliness. In L. A. Peplau & D. Perlman (Eds.), Loneliness. A sourcebook of current theory, research, and therapy (pp. 123-134). New York: John Wiley and Sons.
- Perlman, D. & Peplau, L. A. (1981). Toward a social psychology of loneliness. In S. Duck & R. Gilmour (Eds.), Personal relationships. 3: Personal relationships in disorder (pp. 31-56). New York: Academic Press.
- Rubinstein, C., & Shaver, P. (1982). The experience of loneliness. In L. A. Peplau & D. Perlman (Eds.), Loneliness. A sourcebook of current theory, research, and therapy (pp. 206-223). New York: John Wiley and Sons.

- Russell, D. (1982). The measurement of loneliness. In L. A. Peplau and D. Perlman (Eds.), Loneliness. A sourcebook of current theory, research, and therapy (pp. 81-104). New York: John Wiley & Sons.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA loneliness scale: concurrent and discriminant validity evidence. Journal of Personality and Social Psychology, 39(3), 472-280.
- Schmale, A. H. (1976). Psychological reactions to recurrences, metastases or disseminated cancer. International Journal of Radiation Oncology, Biology, Physics, 1, 515-520.
- Schwartz, M. D. (1977). An information and discussion program for women after mastectomy. Archives of Surgery, 12(3), 276-281.
- Shands, H. C., Finesinger, J. E., Cobb, S., & Abrams, R. D. (1951). Psychological mechanisms in patients with cancer. Cancer, 4, 1159-1170.
- Shavelson, R. J. (1981). Statistical reasoning for the behavioral sciences. Boston: Allyn and Bacon, Inc.
- Sutherland, A. M., & Orbach, C. E. (1953). Psychological impact of cancer and cancer surgery: II. Depressive reactions associated with surgery for cancer. Cancer, 6(6), 958-962.
- Thomas, C. L. (Ed.). (1977). Taber's cyclopedic medical dictionary (13th ed.). Philadelphia: F. A. Davis Company.

- Weiner, B. (1974). Achievement motivation and attribution theory. Morristown, NJ: General Learning Press.
- Weiner, B., Russell, D., & Lerman, D. (1978). Affective consequences of causal ascriptions. In J. Harvey, W. J. Icks, & R. F. Kidd (Eds.), New directions in attribution research (Vol 2). Hillsdale, NJ: Erlbaum.
- Weisman, A. D. & Worden, J. W. (1975). Psychosocial analysis of cancer deaths. Omega, 6(1), 61-75.
- Weisman, A. D., & Worden, J. W. (1976). The existential plight in cancer: significance of the first 100 days. International Journal of Psychiatry in Medicine, 7(1), 1-15.
- Weiss, R. S. (1973). Loneliness: the experience of emotional and social isolation. Cambridge, MA: MIT Press.
- Wenz, R. V. (1977). Seasonal suicide attempts and forms of loneliness. Psychological Reports, 40, 807-810
- Wortman, C., Dunkel-Schetter, C. (1979). Interpersonal relationships and cancer: a theoretical analysis. Journal of Social Issues, 35(1), 120-155.

Appendix A

PERSONAL EXPERIENCE SURVEY

Indicate how often you have felt the way described in each statement using the following scale:

- 4 indicates "I have felt this way often"
 3 indicates "I have felt this way sometimes."
 2 indicates "I have felt this way rarely."
 1 indicates "I have never felt this way."

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>
1. I feel in tune with the people around me	1	2	3	4
2. I lack companionship	1	2	3	4
3. There is no one I can turn to . . .	1	2	3	4
4. I do not feel alone	1	2	3	4
5. I feel part of a group of friends .	1	2	3	4
6. I have a lot in common with the people around me	1	2	3	4
7. I am no longer close to anyone . .	1	2	3	4
8. My interests and ideas are not shared by those around me	1	2	3	4
9. I am an outgoing person	1	2	3	4
10. There are people I feel close to .	1	2	3	4
11. I feel left out	1	2	3	4
12. My social relationships are superficial	1	2	3	4
13. No one really knows me well	1	2	3	4
14. I feel isolated from others	1	2	3	4
15. I can find companionship when I want it	1	2	3	4
16. There are people who really understand me	1	2	3	4
17. I am unhappy being so withdrawn . .	1	2	3	4
18. People are around me but not with me	1	2	3	4
19. There are people I can talk to . .	1	2	3	4
20. There are people I can turn to . .	1	2	3	4

Appendix B

711 North First Street
Mascoutah, Illinois 62258
January 14, 1985

Dr. Letitia A. Peplau
Department of Psychology
University of California, Los Angeles
Los Angeles, California 90024

Dear Dr. Peplau:

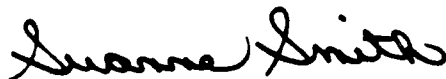
I am a graduate student in Medical-Surgical Nursing at Southern Illinois University at Edwardsville, Illinois. My proposed thesis statement is: clients, representing four stages of cancer, will manifest loneliness as determined by the Revised UCLA Loneliness Scale. The purpose of this study is to identify those cancer clients that demonstrate loneliness so that appropriate therapeutic interventions can be designed and tested. Although various authors, utilizing the interview method, state that the client with cancer experiences loneliness, I have been unable to locate any study which uses an instrument to substantiate this loneliness.

*I don't know
if any
titles.*

I am requesting permission and fifty (50) copies of the Revised UCLA Loneliness Scale for this research. Please let me know the cost of these instruments so I may reimburse you for them.

Thank you for your assistance.

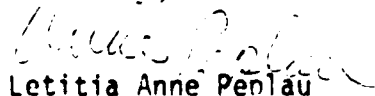
Sincerely,



Suanne Smith, R.N., B.S.N.

Dear Ms. Smith:

I'm delighted to learn of your interest in using the UCLA scale, and I'm happy to have you do so. We have typically reproduced the scale for our own research using mimeos -- or xerox. I'd suggest that you simply have the scale retyped in a way that fits your purposes and duplicate it yourself. Cordially,



Letitia Anne Peplau

P.S. I'd be most interested to learn what you find. Best wishes for your research!

Appendix C

Acknowledgement of Consent

I hereby agree to co-operate and participate in a research project entitled Personal Experiences among Clients Representing Four Stages of Cancer to be conducted by Suanne Smith as principal investigator.

It is my understanding that:

1. All of the research data will be collected and analyzed in a manner that assures confidentiality.
2. None of the procedures will place me in physical danger; I will be warned of any other risks.
3. Experimental procedures will be explained to me prior to their administration.
4. I may ask questions of the researcher and expect pertinent responses.
5. I may refuse to participate in the study or may discontinue participation at any time without prejudice, question, or reprimand.
6. Benefits of the research to me or others will be explained.

Participant's Signature

Investigator's Signature

Address

Phone Number

Appendix D

Demographic Data

Client's Initials: _____ Age: _____

Sex: _____ Marital Status: _____

Primary site of cancer: _____

Date of diagnosis: _____

Present stage of cancer: _____

List of organizations in which currently active: _____

Revised UCLA Loneliness Scale Score: _____

END

FILMED

9-85

DTIC